PERPETUAL FLOWERING GROUND COVER ROSES: THE "COUNTY SERIES"

PAUL MASTERS

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INTRODUCTION

The name "County Series" has been given to a group of repeat flowering cultivars of ground cover roses. As a result of their repeat flowering nature they are much less vigorous than existing cultivars, such as "Max Graf" and "Pheasant". This makes the "County Series" roses much more suitable for small gardens and container growing for garden centre sales. Each British county has its own distinct character as does each of the "County Series" roses.

Flowering from June to October on their own roots, sucker-free, pest and disease resistant and hardy, "County Series" roses have characteristics and a colour range that were not available in existing ground cover cultivars.

Planting distances depend upon the cultivar, but range between $45 \, \text{cm}$ centres for R. 'Rutland' and $75 \, \text{cm}$ centres for R. 'Surrey'. Petals drop cleanly so dead heading is not necessary. A light trim during the autumn and winter can be carried out to keep the plants tidy.

There are many applications for "County Series" roses in the garden and landscape, from conventional ground cover, particularly on banks and other difficult situations, to use as a bedding rose for which R. 'Kent' is quite outstanding. Budded onto a R. rugosa stem they make delightful weeping standards, and planted in hanging baskets add a whole new dimension to rose gardening.

THE CULTIVARS

Rosa 'Suffolk' (Kormixal) 1988. Bright crimson single flowers with prominent golden stamens in great profusion, followed by orange-red hips in autumn; a low spreading shrub, 45 cm by 90 cm.

Rosa 'Essex' (Poulnoz) 1988. Rich pink flowers in large clusters, low dense growth with remarkably even spreading shoots 60 cm \times 120 cm. Amply furnished with small glossy foliage. Awarded Certificate of Merit by Royal National Rose Society 1987. Gold Medal, Dublin 1987. Certificate of Recommendation in The Hague, Holland.

Rosa 'Kent' (Poulcov) 1988. Pure white flowers in large trusses. Semi-double blooms in great abundance which stand up to cold

wet weather during the summer, unlike so many others of this colour. $45 \, \mathrm{cm} \times 60 \, \mathrm{cm}$. Trial Ground Certificate at Royal National Rose Society, St. Albans 1989. Certificate of Merit, Belfast trials. Gold Medal at Baden Baden, West Germany.

Rosa 'Surrey' (Korlanum) 1988. A wide-spreading shrubby grower 60 cm to 90 cm in height and up to two metres across, bearing great swatches of double blooms of soft pink, with deep rose within the heart of the flower, throughout the season until the first frost. Awarded Gold Medal by Royal National Rose Society, 1987.

Rosa 'Rutland' (Poulshine) 1988. A single rose in soft pink freely born throughout the season until the first frost. The delicate pink flowers are set off well against glossy dark green foliage 30 cm × 45 cm. Certificate of Merit 1988.

Rosa 'Hampshire' (Korhamp) 1989. Single glowing scarlet flowers with golden stamens followed by orange-red hips in autumn. Dense bushy growth $30 \text{ cm} \times 60 \text{ cm}$.

Rosa 'Norfolk' (Poulfolk) 1990. Bright yellow, fragrant double flowers in clusters. Neat bush habit 45×60 cm. The first yellow and a major colour break in ground cover roses.

Rosa 'Northamptonshire' (Mattdor) 1990. Flesh pink and white blooms of perfect buttonhole shape resembling R. 'Cecile Brunner'. A dainty but dense grower $45~\mathrm{cm} \times 90~\mathrm{cm}$. Awarded Certificate of Merit by the Royal National Rose Society in 1989.

PROPAGATION—CONVENTIONAL CUTTINGS

Soft material cut from a variety of sources, rooted cuttings, liners, and 2-litre container stock. Cuttings may be taken throughout the growing season as long as the material is soft. These are prepared as leaf bud cuttings, 25 to 30mm. in length. Larger nodal cuttings could also be used. Treated with a 0.25% IBA quick-dip solution and stuck into conventional trays in a 40:60 peat/bark compost. Cuttings could also be direct rooted, three to a liner pot, or in the larger individual cell type trays. Completed trays are placed under open mist. Rooting time depends upon cultivar but starts after $2\frac{1}{2}$ weeks and a high percentage can be expected.

PRODUCTION

Conventional cuttings are potted on during November into a 7 cm peat pot and grown on under glass. This is a slack period at the liner unit and makes good use of available resources.

Liner Compost: Irish moss peat, 4 parts; Vapo Peat, 1 part; 5% grit by volume; Osmocote 8 to 9 months, 2 kg/per cu.m.; Dolodust; and Fritted trace elements.

Routine pest and disease controls and a good standard of hygiene must be maintained. The main problems are: downy mildew, powdery mildew, black spot, and *Botrytis*.

Liners are potted on into a 2-litre final container during April and May and grown on outside. Just before potting, the liners are cut hard back to encourage good shoot and root development. Very little further trimming should be necessary before first sales from the crop can begin in late July.

Final potting compost:

Peat-medium grade, Irish moss;

10% grit by volume;

Osmocote, 15-8-11, 12-14 months, 3.5 kg/cu.m.

Ficote, 16-10-10, 12-14 months, 2 kg/cu.m.

*Ficote, 16-10-10-, 8-9 months, 1 kg/cu.m.

Single Superphosphate 0.75 kg/cu.m.

*Reduce the amount by 50% for late-potted small liners, especially from micropropagation, since during hot weather release can be very rapid and may cause root burning.

PRODUCTION FROM MICROPROPAGATED PLANTS

The explants are weaned and rooted into cell trays in a Sonicore fog unit. From the end of September, supplementary lighting is used to extend day length to 16 hours. This is necessary to enable the unit to utilise space and labour during an otherwise quiet period, to ensure that the customer can receive his plants at the beginning of April, and because we have found explants coming out of 16 hours daylength in the growing room become dormant and often die in the lower light conditions during the autumn and winter.

Lights used are 400 watt SON. PT high pressure sodium lamps made by Thermaforce. These are set at 2.2 m above the crop height, 12 to each fog unit, which has an area of 160 sq. m. This provides a light level of 2,500 to 3,000 lux. Running costs for 28 lamps from the end of September through to the end of April are £400.

Weaned and rooted trays are moved to cold glass until despatch to wholesale customers, or potting-on for our own production. Young plants are potted-on into 7 cm. peat pots during February/March under glass. The liners establish quickly and can be potted into a final 2-litre container during April/May for sales in late July onwards.

Similar pest and disease controls as used in conventional cutting/liner production.

Commercial micropropagation labs. producing "County Series" roses in the UK include:

Micropropagation Services (E.M.) Ltd. East Leake, Leicestershire. Notcutts Nurseries, Ltd. Woodbridge, Suffolk. Pro Culture, Evesham, Worcestershire.

OPEN GROUND PRODUCTION

"County Series" roses bud well in a traditional open ground production system. Although they do not have the advantage of plants on their own roots, some cultivars have more vigour and will produce a larger plant.

Radclive Nurseries, Ltd. Faringdon, Oxfordshire, have used field growing methods to produce a bare-root "County Series" rose on its own roots. Fully hardened plugs from micropropagation are lined out in a bed system during May. Soil preparation to a seed bed standard is very important, as is irrigation, to ensure success. Growth is rapid and a well-branched sturdy plant can be achieved for sale in the autumn of the same year. The excellent shoot to root ratio of these field-grown plants makes them ideal for landscape planting or for containerising for garden centre sales.

PROMOTION

Notcutts Nurseries has been actively promoting "County" roses to the wholesale and retail trade Point of sale material is available for garden centres in the form of a waterproof poster and 8 x 6 in. bed label. Exhibiting at the Flower Show, Chelsea, and constructing a garden at the National Garden Festival, Gateshead, has increased public awareness and created renewed interest in using roses in the garden, which do not have the cultural demands of more traditional cultivars.

THE FUTURE

More cultivars are currently being trialed with improvements and new colour breaks emerging from breeding programmes each year. We have three new "County Series" roses for introduction in 1991: a "handpainted" single type with a white centre and pink edge, a single vivid pink cultivar; and a peach-coloured cultivar with a slight scent and the habit of *R*. "Kent".